

SECTION 16134
CABLE TRAYS - LADDER TYPE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The provisions of the Contract Documents apply to the work of this section.

1.2 SUMMARY

- A. Section includes cable tray.

1.3 REFERENCES

- A. ASTM A123 - Specification for Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars, and Strip.
- B. ASTM A525 - General Requirements for Steel Sheet, Zinc-Coated Galvanized by the Hot-Dip Process.
- C. NEMA FG 1 (National Electrical Manufacturers Association) - Fiberglass Cable Tray Systems.
- D. NEMA VE 1 (National Electrical Manufacturers Association) - Metallic Cable Tray Systems.
- E. NEMA VE 2 (National Electrical Manufacturers Association) - Metallic Cable Tray Installation Guidelines.

1.4 SUBMITTALS

- A. Shop Drawings: Indicate tray type, dimensions, support points, and finishes.
- B. Product Data: Submit fittings and accessories.
- C. Manufacturer's Installation Instructions: Submit application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

PART 2 - PRODUCTS

2.1 METAL LADDER-TYPE CABLE TRAY

- A. Product Description: NEMA VE 1, Class 12C ladder type tray.
- B. Material: Aluminum.
- C. Inside Width: As indicated on Drawings.

- D. Inside Depth: As indicated on Drawings.
- E. Straight Section Rung Spacing: 6 inches on center.
- F. Inside Radius of Fittings: minimum 12 inches.
- G. Furnish manufacturer's standard clamps, hangers, brackets, splice plates, reducer plates, blind ends, barrier strips, connectors, and grounding straps.

2.2 WARNING SIGNS

- A. Engraved Nameplates: 1/2 inch black letters on yellow laminated plastic nameplate, engraved with the following wording:
WARNING! DO NOT USE CABLE TRAY AS WALKWAY, LADDER, OR SUPPORT.
USE ONLY AS MECHANICAL SUPPORT FOR CABLES!

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install metal cable tray in accordance with NEMA VE 2.
- B. Support trays and fasten to structure and finishes in accordance with Section 16210, and the manufacturer's instructions and recommendations. Install supports at each connection point, at end of each run, and at other points to maintain spacing between supports of 10 ft maximum.
- C. Install expansion connectors where recommended by manufacturer.
- D. Install firestopping in accordance with the Section of specifications covering firestopping to sustain ratings when passing cable tray through fire-rated elements.
- E. Ground and bond all metal cable tray.
 - 1. Provide continuity between tray components.
 - 2. Use anti-oxidant compound to prepare aluminum contact surfaces before assembly.
 - 3. Install #4 AWG bare aluminum equipment grounding conductor through entire length of tray; bond to each component.
 - 4. Make connections to tray using mechanical or compression connectors.

END OF CABLE TRAYS – LADDER TYPE